MCCC NEWS

Mid-Cities Commodore Club

December 1984 Issue 21

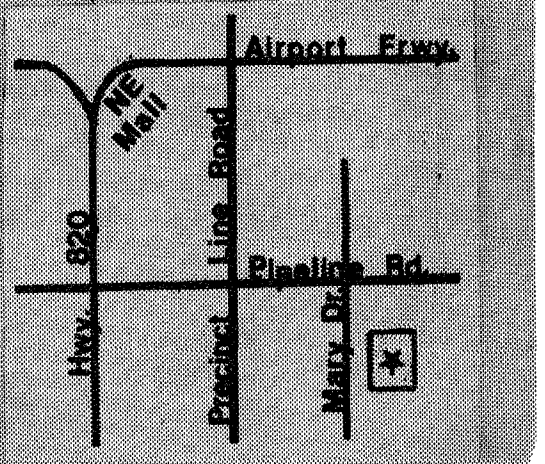
Merry Christmas

MCCC CHRISTMAS MEETING

December 15 1:30 PM

Hurst Recreation Center

Bring snacks, computers and public domain software to display and trade.



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The MCCC would like to remind you that we authorize only the legal use of copy programs at club and chapter meetings. Illegal reproduction of copyrighted material is forbidden at any club gathering.

DO NOT JEOPORDIZE THE MCCC BY COPYING OR SOLICITING COPIES OF COPYRIGHTED SOFTWARE AT ANY MCCC MEETING.

PRESIDENT'S COLUMN

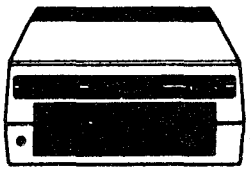
Diane Dews

At the December meeting of the MCCC we will be having the election of officers and voting on constitutional amendments. I hope everyone will try to make it to the meeting.

We're planning some special programs for the meeting, and as most of you have heard by now, a party. The club will be furnishing soft drinks and some snacks and if you would like to bring some kind of treat, please feel free. I would also like to encourage you to bring your computer and any Christmas software you might have.

It's time to renew your membership for next year; we've included a membership form in this newsletter. You can mail it turn it in at the December meeting.

BgC



SOF-TEX

Disk Drive Service

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ROGER HOGGARD
(817) 281-2608

The MCCC NEWS is the official publication of the Mid-Cities Commodore Club (Dallas/Ft. Worth, TX). Editorial contributions are welcome from anyone anywhere in the world of Commodore. We welcome readers' comments, especially regarding any significant errors or omissions, and we will attempt to publish any corrections in later issues.

Material printed in the MCCC NEWS is not copyrighted and may be reprinted or copied by other user groups or individuals who find it helpful. We only ask that you give credit to the author and mention the MCCC NEWS as the source.

The MCCC NEWS accepts advertising from both members of the club and from commercial establishments. This is an opportunity to reach over 500 members of Commodore computers.

Member rates are free for classified ads. These ads must be computer related and not of a commercial nature. A commercial ad is defined as one where you are running a business and are selling the same item or items to many people. Members submitting such ads will be charged commercial rates.

COMMERCIAL RATES are as follows: $60.00 per full page ad; $30.00 per half page ad; $20.00 per quarter page ad; and $10.00 per business card. Non-members will pay commercial rates.

The deadline for submissions to the MCCC NEWS will be the first day of each month. PAYMENT MUST ACCOMPANY AD COPY. Make all checks payable to 'Mid-Cities Commodore Club' and mail the ad copy along with your check to: Michael Cramer, 1353 Kathryn Court, Hurst, TX 76053.

DECEMBER

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MEETINGS

Dec. 8 Arlington Chapter 10:30 AM
Arlington Public Library

Grand Prairie Chapter 1:30 PM
Grand Prairie Public Library

Dec. 15 MCCC CHRISTMAS MEETING 1:30 PM
1:30 PM Bring Snacks and computers/PD software
Hurst Recreation Center

Ft. Worth Chapter will meet in conjunction with the MCCC Christmas Mtg. at the Hurst Recreation Center.

Dec. 17 Ft. Worth Chapter 7 PM
Precinct Garage

Dec. 18 Grand Prairie Chapter 6:00 PM
Grand Prairie Public Library

Dec. 19 Newsletter deadline for January issue.

Please note: The newsletter deadline will be a few days early this month due to the Christmas holidays. Please have all materials to the editor by December 19. No exceptions this month!

Jan. 5 Board of Directors Mtg. 10 AM
Hurst Recreation Center

COMING UP

WORDPRO 3 and Special Print Features

Grady Langley

My only dissapointment with the WORDPRO 3 word processing software is the absence of special print commands which would allow the use of fancier printing options on most printers. I have an Epson RX 80 printer which has the capability of emphasized, *italic*, compressed, **expanded**, and elite print as well as some combinations thereof. The WORDPRO 3 instructions contained no information about this, only directions for special character commands.

My need to change print styles in mid-text went unsatisfied until I read an article in the September 1984 MCCC News. The author, Jay Peat, told how he accomplished the feat with his EASYSCRIPT word processing software. Soon I had mastered the trick with WORDPRO 3.

The key to the trick is the special character feature of the software. Up to ten special ASCII values can be used at any given time when defined by a format statement. The instructions refer to these values only for use in printing special characters such as "^" which has a decimal value of 94 in the ASCII codes for the Epson printer. These features are described on page 8-5 of the WORDPRO 3 instructions. For example, to print "^" you define in a format statement 0=94, then use the "up arrow" followed by "0" in the text where the special character is desired.

The Epson printer interprets certain ASCII codes as a command to change print style, as do most printers. For compressed print the Epson recognizes the control code CHR$(15) to turn on that print style, and CHR$(18) to turn it off. By defining 0=15 and 1=18 in the format statement, and using those characters in the text, compressed print can be turned on. Fortunately the print codes are transparent to the word processor software, and thus not printed. The command is received by the printer however.

The Epson printer requires two control codes from some print styles. For example, italics print requires <ESC>"4". The decimal value of <ESC> is 27, and the value of "4" is 52. By defining both 27 and 52 in the format, and using the two corresponding characters you have assigned, in series, the command will be received by the printer. For example, if you define 0=27:1=52 in the format statement, then the characters ↑0 ↑1 are inserted in the text where emphasized print is to begin. A similar command is required to turn it off.

There are complications which you may encounter. As can be seen in examples above, the WORDPRO 3 software has problems when fancy prints are used and the text is right justified. Margin over-runs can occur on expanded print. Also, problems occur when centering text on a line. The software does not change spacing as you change print styles. Another problem could occur when using special graphic characters. Consult your printer and interface instructions as needed.

Refer to your printer instruction manual for the ASCII codes used by that particular device.

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COMAL UPDATE

T.S.Creasy

Two days before this article was due I received my COMAL 2.0 cartridge. I haven't had much time to work with it, but I have already formed some opinions. First, its great! Several packages are included in the cartridge. A package is an enhancement to standard COMAL that makes it more useful to a specific computer. (You can write packages of procedures and use them without really knowing that they are not a part of COMAL.) The packages included are:

SYSTEM - Controls the interaction of COMAL with the computers hardware. You can define the function keys(default definitions are in place on power up), set up printer specifications (great for non emulating printers), use the real-time clock (disk and tape I/O don't upset the real-time clock!), and switch screens with ease.

GRAPHICS - Procedures include WINDOW, DRAW, PLOT, MOVE, CIRCLE, ARC, TEXTSTYLE, TURTLESIZE, PRINTSCREEN (a BUILT-IN, 5-grey scale, fast dump for Commodore and emulating printers) and many more. A windowing environment is supported (like Macintosh).

TURTLE - A true logo-type package, must be used with GRAPHICS package.

SPRITES - Procedures include DEFINE, SHOWSPRITE, SPRITECOLOR, SAVESHAPE, STAMPSPRITE (draws sprite on hires screen, good to use before a printer dump), ANIMATE. ANIMATE is a sprite control language, separate from COMAL. You can set up a sprite an have it run without further control. Colin Thompson wrote many of the demo programs, and a sprite, graphics, and music demo that is most impressive.

FONT - Procedures setup and apply custom character sets.

SOUND - Sound can be controlled by COMAL or by PLAYSCORE, a music control language. COMAL can run independently of background music.

PADDLES - Port 1 or 2 paddle reading procedures

JOYSTICKS - Like the PADDLE package.

LIGHTPEN - Control a lightpen from port one

ENGLISH and DANSK - Error messages package. Yes, you can get DANSK error messages by keying USE DANSK.

There are other features such as an enhanced editor. The standard full screen editor is still in place, but more control has been added. If you never liked quote mode (wherein control characters such as reversed hearts and the like are printed when typing after a quote) you can turn it off. Also, FIND and CHANGE is part of the system.

Function Keys

A set of function keys is now available that include the 8 function keys and control keys; for example, CTRL A removes the indentations of a LISTed line so it can be edited. CTRL-P dumps the text screen to the printer! The neat thing is that although CTRL A to Z are available, only 13 have been predefined. The system package that defines the function keys also defines control keys. Now the C64 has 34 TRUE function keys. (My immediate favorite is f7, RUN. If you get a disk directory and place the cursor at the beginning of the line and press f7, the program will load and run.)

The BAD News

Finally, there is some bad news about the cartridge. The system is easy to crash. If you don't have a reset switch on your 64 you will get one. Requesting several disk catalogs in a row when using pattern matching will crash the machine. Also, interrupting animated sprites and sound can upset COMAL 2.0 as well.

There is no apparent way to use a second disk drive with COMAL 2.0, but this may be from the lack of documentation. LOAD "program" ,9 will not work; neither will SAVE or CHAIN. But strangely enough PASS will now initialize drive 9 although it wouldn't in the 0.14 version. This hints that multiple disk use is possible. The only documentation that came with the cartridge was 12 photocopied pages of dot matrix print-out. Len Lindsey sent a note that the book would be out in a couple of weeks. The delay may be tied to the multiple trips to Denmark that have been necessary the last few months.

The Cost of COMAL

The day after my cartridge arrived I received a letter concerning the cartridge and its future in North America. Commodore has apparently decided once and for all to ignore COMAL here. The COMAL USERS GROUP, U.S.A (CUG) will be the only source. Mr. Lindsey is in Denmark now trying to change the distribution agreement. Currently the cartridge can only be sold by mail. Lindsey is trying to get store distribution rights so that Target, Videoland, etc. can sell cartridges.

The price of the cartridge package has increased from $100 to about $130. The cartrige alone is still $100, but the price of manuals and demo-disks has gone up. There are 1000 cartridges available, not 500 as last reported; but, the higher package price now applies. The little documentation I received indicates that I have cartridge #60 (because my last name begins with a "C"?) so you can possibly get one before the end of this year. CUG hints at a price increase next year, though moving production from Denmark to Honk Kong (as well as changing from EPROM to ROM) could dramatically reduce the cost of a cartridge.

Wordprocessing and COMAL, Part 1

The benefits of wordprocessors don't have to be limited to letters and articles. Many computers systems use the advanced features of wordprocessors (like search and replace) for writing programs. COMAL makes this possible on the 64. Besides writing new programs, it makes things much easier when you try to adapt a favorite BASIC program to COMAL. The system I use is COMPUTE! Gazette's SPEEDSCRIPT and CONVERT64 programs. To accomplish the transfer you have to list the BASIC program to the disk:

```
(Be sure you're in BASIC 2.0)

LOAD " program name ",8
OPEN 8,8,8,"0: prg name .blt,S,W"
CMD 8: LIST
(When the listing has finished)
PRINT#8:CLOSE 8
```

Now you have a sequential file version of your BASIC program. Use the CONVERT64 program to process the file for SPEEDSCRIPT. Now you can clean up the program.

The first thing you should do is substitute long variable names for the short names of BASIC. This makes things much more readable. Just use the search command to find each use of the old variable name and type in its new name. Also you should fix the integer sign. In BASIC an integer is designated by the % symbol. You must change this to a # to be compatible with COMAL. GOTO and GOSUB will be major problems. GOTO is the easiest since it is still allowed in COMAL. However, it doesn't use line numbers, instead you must name the branch. If you can figure out why the branch was made you can give it a nice descriptive name like PRINT'MENU'TO'DISPLAY. Otherwise you can give it a name like FIRST'BRANCH'I'DON'T'UNDERSTAND. GOTO names are placed on a line alone like this:

```
FIRST'BRANCH'I'DON'T'UNDERSTAND:
```

GOSUB is where the crisis starts. Since procedures are used in COMAL you have to change quite a few things. First, find a GOSUB call with the Find option of the wordprocessor. Then make the GOSUB call a COMAL remark like this:

```
30 IF V$="TED" THEN //GOSUB 200
```

The two slashes make anything that follows them a REMark. Now find line 200. You will then add COMAL statements to create a procedure.

```
PROC PRINT'NAME //COMAL
200 PRINT "THE NAME IS "+V$
210 //RETURN
ENDPROC
```

Notice that there are no line numbers on the COMAL lines. They aren't required by COMAL during a run; we will add them later. Now that you've given the subroutine a name, you should use the name at every call; for example:

```
30 IF V$="TED" THEN PRINT'NAME
   //GOSUB 200
```

Now search for all GOSUB 200 calls and use the procedure name instead. For BASIC conversions I use open procedures since all BASIC variables are global; that is, N$ means the same variable throughout the entire program.

The rest of the conversion follows in this pattern, however, a really sloppy program with GOTO's and GOSUB's within other GOTO's and GOSUB's may be impossible to convert without careful analysis of what the program does, for example:

```
190 REM SUBROUTINE ALPHA
200 PRINT "NAME "+V$
210 IF V$="TED" GOTO1000:REM EXIT2
220 RETURN
...
1000 REM EXIT2 FROM SUBROUTINE
1010 PRINT "HI TED"
1020 RETURN
```

This would be difficult to convert if it wasn't simple enough to understand. Confusing programs might be easier to write from scratch in COMAL.

Next month I will present a program that will take the new version of your BASIC program, strip off the old BASIC line numbers and renumber it for COMAL.

The Confusing Library Disk

On one of the COMAL disks I placed in the MCCC library were some confusing files. Most of the PRG files are COMAL programs and can be LOADed and RUN. However some of the files are WORDPRO files. These are the "Learning Comal" files. You need WORDPRO or SPEEDSCRIPT to look at them. Also some of the SEQ files may be LISTed programs. Use ENTER " file name " to load them into COMAL. If you get a lot of errors during the ENTER, the SEQ file is probably a data file. The file name conventions recommended are:

```
.com -  0.14 COMAL PRG file
.c20 -  2.00 COMAL PRG file
.bas -  basic PRG file
.blt -  basic SEQ program file
.lst -  COMAL SEQ program file
.wor -  WORDPRO file
.spd -  SPEEDSCRIPT file
.doc or .txt - ascii text file
```

I'll try to use them consistantly from this point.

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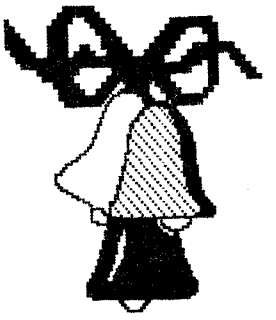

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GHOSTBUSTERS and SPACE SHUTTLE
Two Activision Reviews

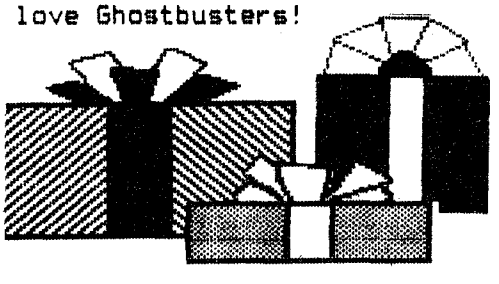
B. Cramer

Space Shuttle - another great game by Activision? NO!

On the outside Space Shuttle looks like an "easy to play" and fun game reminiscent of the flight simulator style. After thumbing through the 30-plus pages in the flight manual, I learned it would be quite some time before I got off the ground with this game. When I finally sifted through all the technical material, I found out how to start the game.

Space Shuttle consists mainly of three parts, 1) Takeoff, 2) Docking with a satellite and 3) Returning to Earth. Although very realistic, this game is hard to master and is burdened by many instructions and slow movement.

I just don't think Space Shuttle will 'fly' with the majority of game lovers. If you like Activision games, you'll love Ghostbusters!



"Who ya gonna call?...GHOSTBUSTERS!"

When I first heard that there was a game for the C64 called "Ghostbusters", I was skeptical. Activision software has many good games on the market, however, they currently do not have a game in the top ten or one that sticks out in s crowd. Then, here comes Ghostbusters.

The game starts with the usual Activision title screen but soon breaks into the familiar Ghostbusters' theme song complete with a bouncing ball sing-along. The music is some of the best yet and adds a lot as it continues to play throughout the game.

Ghostbusters is loosely based on the movie and is quite different from arcade-style shoot 'em ups. You are given a loan from the bank to start your own company. You then purchase your car from four choices, select your equipment, and load it to your car with a forklift. Then it's off to headquarters to pick up your helpers.

During the game you travel the streets freezing 'roamers' as you look for indications of a 'slimer' that you must catch using your special guns and traps. As you drive to the site, you are obliged to vacuum the 'roamers' lest the city be damaged by the forming of a 'marshmallow man' whose destruction is deducted from your profit. The object of the game is to capture slimers which earns you money, travel to Zuul, slip 2 men through the door and reach the top of the temple. All of this must be accomplished before the keymaster meets the gatekeeper, a catastrophe that will dissolve your business.

Ghostbusters is without a doubt the best game I've seen in a long time. It has all the attributes of a great game including a very special bonus; it talks to you and does it very well.

Ghostbusters retails for $31.95 and is available at Babbage's for $27.15. We would like to thank Babbage's for loaning us the best software in town.

Arlington Chapter NEWS

C. Davidson

The next chapter meeting will be Dec. 8 at 10:30 AM at the Arlington Public Library. Bring your computer and your favorite Christmas programs to display at the meeting (public domain programs only, please). Also, bring some Christmas goodies to celebrate the holiday season.

Our program will be presented by Harold Williams who will talk about disk files. We will have a Q/A session and time for public domain software swap after the program.

Also scheduled for this meeting is the election of officers. The nominees are:

President	Ray Montoro
Vice-Pres.	Dave Rogers
Secretary	Jonathon Riba
Treasurer	Clem Countess
Librarians	Charlie Merriot
	Larry Dehmel
	Darryl Simmons
Reporter	Charlie Davidson

A special thanks to Bill Raecke for his impromptu discussion of COMAL at our last meeting.

PUZZLE ANSWERS

Don Ketchum

California Area Commodore Terminal Users Society (CACTUS)

Here is last month's program and an explanation of why it works.

```
10 FOR A=1TO-1STEP0
 20 B=B+1
 30 PRINT B
 40 A=B=5
 50 NEXT A
```

When you run the program it prints the numbers 1, 2, 3, 4, 5 in one column and then stops. The key to what happens is in line 40 A = B = 5 which probably looks strange to most of you. On some computers this statement would mean that both A and B are set to 5 but not on a Commodore.

In an IF...THEN statement the expression between IF and THEN has a possibility of being true or false. If it is true the computer gives it a value of -1 and if it is false it is given a value of zero. When it has a value of zero, the computer ignores the statement following THEN. When it has a value of -1 (or any other value) the computer executes the statement following THEN.

To test these ideas type in this program.

```
10 INPUT B
20 IF B THEN PRINT B
30 IF B=9 THEN END
40 GOTO 10
```

RUN the program and you will find that for any value of B except zero the IF statement in line 20 will cause the value of B to be printed. When B is zero the PRINT B after THEN will be ignored. If B is given a value of 9, it will be printed and then the IF statement of line 30 will end the program. Now change line 20 to:

```
20 PRINT B=5
```

and RUN the program. You will find that for any value of B except 5 line 20 will print zero. When B is 5 line 20 will print -1. Again, when B is 9, line 30 will end the program.

Now, back to the program from last month. In line 40 the statement could be taken as A = (B=5) where A has a value of -1 when B=5 and A has a value of zero for any other value of B. The FOR statement in line 10 does not let A change in value because of the STEP 0. Line 20 changes the value of B each time through the loop so line 30 prints a new value of B each time. In line 40, A has a value of zero for each value of B other than 5 so the FOR...NEXT loop continues because it is looking for A having a value of -1 to end the loop. When B finally gets to 5, A then equals -1 and the loop and program are ended.

Equipment Advice

S. Fogolini

By following several simple rules you can avoid many costly repairs. Here are a few tips.

1. Never insert or plug anything to your machine <u>while it is on.</u>
2. Do not leave the computer plugged into a wall socket when not in use. I have been asked to repair several machines that were plugged in during an electrical storm. Needless to say, there was not much I could do.
3. When using peripherals, always turn on the machine first, then one item at a time. Remember, the machine is <u>first on, last off.</u>
4. If you are using the Commodore cassette, cut the useless ground wire off. It has found its way into computers and shorted out supply voltages more than once.
5. Although you own a machine that is "state of the art", they are still subject to destruction by static. Do not handle them unless you have the proper tools.

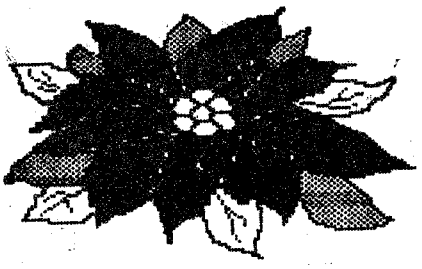
The most common problems I have run across are:

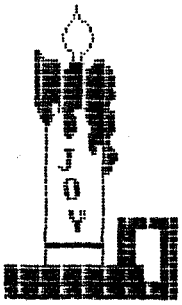
Blue or Blank Screen - This is caused by one of two things:

1. Loss of voltage due to a bad power supply or blown fuse. Fuse replacement is simple and can be done by almost anyone.
2. The computer's inability to "power up". This can be caused by several things, shorted data lines (bad RAM or ROM), bad PLA U-17, etc. These chips are not available and cannot be purchased.

Flashing screen or colors change by themselves. This is caused by a bad PLA or ROM.

For the most part the machines are very reliable and most problems are caused by normal wear and tear.





The MCCC is grateful to Colin Thompson (C64 West) Valerie Kramer (SFVCUG) George Pope (Catalina CCC) for their generosity and willingness to donate programs to our library. Most of the new library disks, listed on pages 10-11, were acquired through the help and assistance of these three people. Thank you very much.

Ft. Worth Chapter NEWS

Scott Payne

The year is drawing to a close and it has been a good one for the club. The Ft. Worth chapter has remained strong with a healthy membership which is largely due to the varied and well organized programs that were supported by our members.

Our December chapter meeting will be held in conjunction with the MCCC club meeting, Dec. 15 at 1:30 PM. We will be electing chapter officers at this time. The following people have volunteered to run for office:

<u>President:</u>
Mary L. Hagemeyer

<u>Vice-Pres.:</u>
Dave Huebner

<u>Sec/Reporter:</u>
Randy Jellison

<u>Librarians:</u>
Jill & Gary Campbell

There are many opportunities for helping with chapter leadership. Please contact one of the officers if you are interested.

A special 'thank you' to Gerry Barker from Startext for his presentation at our last meeting. We appreciate his information on the new version of Startext as well as his willingness to answer questions.

USER GROUP DISKS
COLIN THOMPSON

NOLAN'S PLACEBO:
An ounce of image is worth a pound of performance.

My story is not unusual. The first time I tangled with COMAL was nearly the last. The COMAL Sampler Disk, my introduction to COMAL 0.14, was sent to me by Tom Lynch, President of the San Fernando Valley User Group. He had previously told me that COMAL was fun and I should try the disk as soon as I got it. My response was something like, "I tried Forth; my brain STILL hurts. Is this COMAL going to be easier to deal with?".

"Yes", said he, so I tried it. My first two hours with COMAL were like a roller-coaster ride. I liked the hi-res screen and the Turtle. The pictures and patterns the Turtle traced were impressive. The remainder of the programs (and non-programs) left me confused and bewildered. Most of these didn't have an obvious reason for existance. And what on earth is a PROC, I kept asking. No manuals or books or leaflets accompanied my COMAL disk, so I was on my own in a jungle that revealed some tasty looking fruit behind some nasty looking thorns.

I guess I had seen enough to keep me interested. I eventually discovered Len Lindsay and because of him, I now know what a PROC is. My point is this: The COMAL Sampler Disk is a mixture of procedures, routines, training literature of questionable value, and some Sprite/Turtle demonstration programs. As I look back on my experience, I realize the only programs on that disk I wanted to know about were the Demos. The others only frustrated me. Now, several months later, I know exactly what the other programs do and how to use them. They have become valuable to me; the Demos are now used as a source of clever code to be 'robbed' for my own use.

The Sampler Disk was assembled from the few existing 0.14 programs available at the time. There simply weren't enough Demo programs to make up a full disk. That was six months ago. In only six short (but fun-filled) months, COMAL has caught on across the country like no other language before it. I've found that most people require three months to become acclimitized to the COMAL environment before writing a program. That's fair. I now expect it. In the last six months COMAL has attracted the interest of hundreds of good programmers, all looking for a creative outlet for their imagination. Programs are being written. All kinds of programs. It reminds me of the early days of the Pet- so much to write, so little time. Some people re-write their favorite BASIC programs into COMAL while others concentrate on the kinds of programs that COMAL alone will execute. Regardless of the nature of the programs, many COMAL programs now exist and more are being written each day. That's good news. You may be asking yourself, "How do I get my hands on these programs"?

The answer depends on what kind of programs you want. As a complete newcomer to COMAL, you should be enjoying the wide variety of Demo programs that are now available. Advanced COMALites want more useful programs. Given this simple premise, Len and I have arrived at a scheme to provide both kinds of disks.

The USER GROUP DISKS are designed to be a "first look" at COMAL. Non-threatening. Easy to LOAD & RUN. Fun to watch. In other words, frustration-proof. These disks are assembled with Demo programs that ANYONE, regardless of experience can enjoy. Many of the Demos show off the Turtle and X-Y Graphics. They usually loop endlessly, changing patterns and colors (something like commercial TV). Each User Group Disk has a few useful programs like screen dumps or label makers, etc. These programs may be used sucessfully after you get familiar with COMAL- about two or three hours usually. There are also a very few PROCedures on each disk, clearly marked with ".proc". They are meant to be used in your first COMAL program. A page of documentation accompanies each disk, to help the first time COMAL user get started. I've tried to cover all the bases, eliminating the common pitfalls a novice might encounter.

The COMAL TODAY DISKS are aimed at a different audience. These disks feature more advanced programs. Applications programs, PROCS, utilities, Machine Language and of course a few Demos will be found on the COMAL TODAY disks. It's hoped that whatever your level of experience, there is a series of disks available for your enjoyment.

Where do all these programs come from? You and your friends, of course. Although I've written a few dozen COMAL programs, I can't expect to fill up the User Group Disks all by myself, so I'm asking you to send me your programs. Big or small, useful or frivolous, unique or modified, I don't care, just send them in. Your programs will be reworked or debugged if necessary and then assigned to a COMAL TODAY or User Group disk. The diskette you send will be returned with the latest disk of your choice recorded on it. That's a fair trade. You send me one program and I send you back 50 or more on your diskette. By the end of the year, we should have amassed a large body of public domain COMAL programs, available to all through the COMAL User Group or your local club's library. Remember that these disks may be copied and added to your library. There are some legal restrictions governing the resale of COMAL disks by individuals for profit, so if you want to sell the disks, write to the COMAL Users Group for information about licensing.

User Group Disks #1, 2, & 3 are now available. You may send your COMAL programs directly to me or to the COMAL Users Group, but either way, I'll receive them for processing. When you send in a disk, please make it easy for me to process your disk. Just follow this outline and all will go well:

1. Put the disk inside a sturdy disk mailer.
2. Put enough postage on the mailer to return it.
3. Clearly write your name and address on the mailer.
4. Put the mailer inside a larger envelope addressed to me or the COMAL Users Group.
5. Inside the envelope include a printed directory of the disk.
6. Include a written description of each program. (brief is ok)
7. Each program should be LISTed with '.L' and SAVEd.
8. You don't have to put the language on the disk.
9. Don't send BASIC programs.
10. If you submit a 2.0 program, add '.2' as a suffix to the filename.
11. Please include your telephone number.
12. Allow three weeks for processing time.
13. State which disk you want in return.
14. Send public domain programs only.

If you make it easy for me, I can put out more disks each month. The important thing to remember is you don't have to be a programming wizard to write a nifty COMAL program. Some of the programs on the User Group Disks are 'first programs'. I hope they encourage you. Short programs are just as good as long ones. Special purpose programs can be modified into a satisfactory Demo. Please don't sit on a program. Let me see it.

If we all cooperate in this joint adventure, we should have 20 User Group Disks by this spring. Now that's a goal worth shooting for!

Colin F. Thompson
1307 Colorado Avenue
Santa Monica, CA 90404

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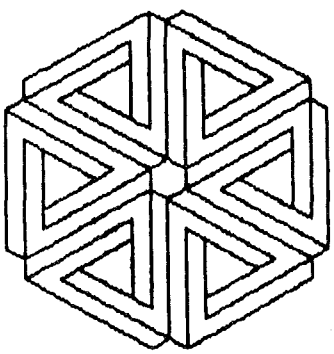
PRESS F1 TO CONTINUE



Optical Triangle Swirled into Hexagon

NEW LIBRARY DISKS

0 "user group #1 " fo 2a
6 "boot c64 comal" prg
131 "c64 comal 0.14" prg
5 "comalerrors" seq
10 "hi" prg
1 ">------- ------<" prg
1 "--SCREEN DUMP---" prg
11 "1525 screen dump" prg
1 "--DISK COPIERS--" prg
8 "sd2 copier" prg
8 "sd2'copy&label" prg
1 "--LABEL MAKERS--" prg
16 "label" prg
9 "mail'label'hs" prg
1 "---PROCEDURES---" prg
6 "title'page.proc" seq
3 "shell'sort$.proc" seq
3 "header.proc" seq
1 "-PRINTER UTILITY" prg
22 "seq'print" prg
1 "-DEMO PROGRAMS--" prg
17 "3d'cube" prg
9 "aprilfool" prg
2 "beeper" prg
3 "bounce" prg
2 "c'curve" prg
4 "circles'key" prg
10 "clock" prg
3 "cones" prg
9 "curve" prg
4 "design 2" prg
3 "design 3" prg
2 "design 4" prg
8 "diamond" prg
2 "dragon" prg
3 "eight boxes" prg
6 "etch-a-sketch" prg
4 "graf1" prg
4 "graf2" prg
5 "graf3" prg
6 "graf4" prg
5 "graf5" prg
5 "graf6" prg
4 "grid" prg
10 "hanoi" prg
3 "hilbert" prg
9 "life" prg
3 "p'circle" prg
4 "percent gain" prg
1 "rnd'bounce" prg
3 "serpent" prg
5 "spirolateral" prg
4 "spiro.plain" prg
9 "starry night" prg
4 "the'thing" prg
4 "turtlestick 6" prg
5 "turtlestick 7" prg
8 "who" prg

0 "user group #4 " dk 2a
6 "boot c64 comal" prg
131 "c64 comal 0.14" prg
5 "comalerrors" seq
16 "hi" prg
2 "----- ----------" prg
1 "--APPLICATIONS--" prg
1 "-----PROGRAMS-----" prg
34 "record keeper" prg
17 "label-ab" prg
2 "bills" seq
1 "address" seq
1 "---UTILITIES----" prg
7 "dumpscreen.1525" prg
7 "terminal" prg
15 "comalerror'gen" prg
1 "---PROCEDURES---" prg
10 "accept'demo" prg
28 "hersh demos" prg
3 "str$.proc" seq
3 "val2.proc" seq
1 "-DEMO PROGRAMS-" prg
9 "arabesque1" prg
10 "arabesque2" prg
8 "arabesque3" prg
9 "arabesque4" prg
8 "arabesque5" prg
9 "arabesque6" prg
10 "arabesque7" prg
2 "checkerboard" prg
35 "clue" prg
3 "comal 2.02 boot" prg
1 "dizzy turtle" prg
9 "drum" prg
4 "fanfare" prg
8 "flasher" prg
34 "keno.game" prg
3 "kenoboard" prg
7 "name game" prg
8 "pern'game" prg
7 "print boxes" prg
4 "print using demo" prg
8 "rectan" prg
7 "rectangulus" prg
4 "scale" prg
7 "son of moire" prg
8 "son'of'pinwheel" prg
3 "spiral'sqr" prg
7 "sprite'circle" prg
12 "starwars" prg
16 "supersketch" prg
6 "weirdness" prg
2 "window" prg
7 "------- - ------" prg
69 "midwestern 5.1" prg
7 "term.c1" prg
10 "mlmid" prg

0 "user group #5 " gd 2a
6 "boot c64 comal" prg
131 "c64 comal 0.14" prg
5 "comalerrors" seq
17 "hi" prg
1 "--SCREEN DUMPS--" prg
6 "neccomaldump" prg
3 "txt.screendump.1" seq
1 "---FUNCTIONS----" prg
1 "asc.func" seq
2 "scr2petsci.func" seq
1 "---DATA FILES---" prg
1 "design.dat" seq
1 "flake.dat" seq
5 "e.dat" prg
4 "f.dat" prg
32 "g.dat" prg
1 "-DEMO PROGRAMS-" prg
12 "arabesque8" prg
4 "arcs.demo" prg
4 "card'dealer" prg
5 "circle'maker" prg
6 "circle2.demo" prg
8 "city'scape" prg
5 "color mix" prg
3 "color'pic'loader" prg
18 "cube designer" prg
12 "dog/cat" prg
13 "dot.and.line" prg
5 "drawshape.demo" prg
11 "drumette" prg
5 "envelope'print" prg
5 "fast'circle" prg
2 "fillbox" prg
8 "flurry" prg
4 "fourier sq" prg
6 "graphics demo" prg
7 "haiku" prg
10 "house" prg
6 "kaleidoscope" prg
8 "moon phase" prg
3 "moving'turtle" prg
31 "music'synth'eric" prg
5 "pauls math'add" prg
2 "poly'circles" prg
2 "polygoncrazy" prg
8 "probability" prg
7 "random'show" prg
10 "readsprite/demo" prg
17 "strs retirement" prg
26 "therapy" prg
7 "turtlestick8" prg
1 ">LOAD FROM BASIC" prg
69 "midwestern 5.1" prg
7 "term.c1" prg
10 "mlmid" prg

0 "user group #2 " gl 2a
6 "boot c64 comal" prg
131 "c64 comal 0.14" prg
5 "comalerrors" seq
10 "hi" prg
1 "-FEATURE PROGRAM" prg
8 "gutenberg'shell" prg
24 "alpha1'gen" prg
21 "alpha1.dat" seq
30 "alpha2'gen" prg
30 "alpha2.dat" seq
23 "gutenberg'Ademo" prg
11 "gutenberg'Bdemo" prg
1 "--SCREEN DUMPS--" prg
13 "bit'print'epson" prg
16 "1525 pixel dump" seq
1 "---PROCEDURES---" prg
2 "x-ycor.proc" seq
3 "heading.proc" seq
1 "circle.proc" seq
6 "title'page.proc" seq
1 "-----PROGRAMS-----" prg
6 "basic'to'comal" prg
2 "coin flip" prg
7 "comal art" prg
2 "ct.header" prg
12 "curvette" prg
6 "find'string.demo" prg
10 "flowers" prg
8 "four circle" prg
3 "hamburger" prg
11 "hourglass" prg
9 "lifer" prg
6 "lissajous" prg
24 "new'house" prg
32 "nh3.exc" prg
7 "pinwheel" prg
23 "polymusic" prg
3 "spiral'star" prg
6 "squiral mod" prg
8 "star'power" prg
19 "starwatch" prg
7 "tabby" prg

0 "user group #3 " as 2a
6 "boot c64 comal" prg
131 "c64 comal 0.14" prg
5 "comalerrors" seq
10 "hi" prg
1 "-TWIN 1541 COPY-" prg
38 "tddcfc" prg
6 "tddcfc.inst" prg
1 "--SCREEN DUMPS--" prg
24 "prowriterdump.1" seq
27 "nec8023 scrndump" seq
3 "nec ml dump" prg
2 "ml'dump.obj" prg
1 "---PROCEDURES---" prg
1 "colors.proc" seq
1 "--SPRITE FILES--" prg
7 "abc.sprite" seq
2 "rocket.sprite" seq
1 "---UTILITIES----" prg
14 "dynam-data-8" prg
30 "84expenditures" prg
1 "-DEMO PROGRAMS-" prg
6 "a maz'in basic.b" prg
14 "a maz'in comal.c" prg
5 "a maz'in simon.s" prg
18 "angry.dragon" prg
8 "another'moire" prg
11 "atari graphics" prg
11 "bagel" prg
9 "beep/gong.demo" prg
9 "chris'star" prg
5 "circles" prg
8 "color swirl" prg
14 "comal promo" prg
6 "crazy quilt" prg
29 "fft'model" prg
8 "key draw" prg
12 "music'all'.demo" prg
9 "pascalstrekant" prg
7 "polar" prg
6 "rnd color sqs" prg
6 "shapes" prg
6 "sin'on'the'side" prg
7 "spiral'cir" prg
13 "spirograph" prg
7 "spotty" prg
9 "tiles" prg
69 "ravics term v8" prg
1 "startext" seq

0 "TODAY DISK 4 " A6 2A
6 "BOOT C64 COMAL" PRG
131 "C64 COMAL 0.14" PRG
5 "COMALERRORS" SEQ
16 "HI" PRG
7 "ABC.SPRITE" SEQ
24 "ALPHA1'GEN" PRG
21 "ALPHA1.DAT" SEQ
30 "ALPHA2'GEN" PRG
30 "ALPHA2.DAT" SEQ
9 "WALL'CLOCK" PRG
1 "COMAL'BUG-A" PRG
1 "COMAL'BUG-B" PRG
3 "DEC'TO'HEX/DEMO" PRG
16 "DISK'PROTECTOR" PRG
2 "DISK'TALK'EXAMP1" PRG
2 "DISK'TALK'EXAMP2" PRG
7 "DODGE'EM" PRG
12 "DUMP'1525" PRG
12 "DUMP'BIG'EPSON.L" SEQ
21 "DUMP'NEC8023A" PRG
20 "DUMP'PROWRITER" PRG
3 "DUMPSCREEN.PROC" SEQ
4 "DUMPSCREEN/DEMO" PRG
16 "DUMPTEXT1525.L" SEQ
14 "DYNAM'DATA" PRG
5 "FIND'STRING/DEMO" PRG
8 "GUTENBERG'SHELL" PRG
23 "GUTENBERG'âDEMO" PRG
11 "GUTENBERG'çDEMO" PRG
2 "HEX'TO'DEC/DEMO" PRG
4 "JOYSTICK.PROC" SEQ
1 "LOCK'LOWER.PROC" SEQ
1 "LOCK'UPPER.PROC" SEQ
4 "LOGICAL'OPS.FUNC" SEQ
8 "ML'STRING/DEMO" PRG
10 "MUSIC'ALL/DEMO" PRG
3 "NUM-STRING/DEMO" PRG
3 "OPT'TRIANGLE" PRG
8 "OPTICAL'HEXAGON" PRG
3 "PADDLE.PROC" SEQ
6 "POLYSPIRALS" PRG
3 "PRIME/DEMO" PRG
7 "RAM'ERRORS" PRG
5 "RANDOM'PLOT" PRG
2 "ROCKET.SPRITE" SEQ
1 "SCREEN'LOCATION" PRG
2 "SCROLL'DOWN/DEMO" PRG
22 "SEQ'PRINT" PRG
4 "SPIROLATERAL" PRG
1 "STARS" PRG
15 "TAKEOFF/DEMO" PRG
3 "TRI'HEX/DEMO" PRG
38 "TWO'DRIVE'COPIER" PRG
7 "TWO'DRIVE'INSTRU" PRG
1 "UNLOCK'CASE.PROC" SEQ
1 "WANDERING" PRG
8 "DIAMOND" PRG
8 "TILES" PRG
1 ">--- ----------<" SEQ
1 ">THE FOLLOWING <" SEQ
1 "> PROGRAM IS <" SEQ
1 "> WRITTEN IN <" SEQ
1 "> BASIC <" SEQ
1 "> ---------- <" SEQ
17 "1541BACKUP(FREE)" PRG

```
0 "UTILITY DISK #1 " U1 2A
6     "BOOT C64 COMAL"      PRG
131   "C64 COMAL 0.14"      PRG
15    "HI"                  PRG
5     "COMALERRORS"         SEQ
1     "----------------"    SEQ
15    "GENERATE ERRFILE"    PRG
8     "RAM'ERRORS"          PRG
1     ">---PRINTER----<"    SEQ
12    "DUMP'1525"           PRG
12    "DUMP'BIG'EPSON.L"    SEQ
21    "DUMP'NEC8023A"       PRG
20    "DUMP'PROWRITER"      PRG
4     "DUMPSCREEN/DEMO"     PRG
1     "FILE'TO'PRINT"       PRG
9     "8023P'OPTIONS4"      PRG
1     ">---SPRITES----<"    SEQ
7     "ABC.SPRITE"          SEQ
27    "SPRITE'EDITOR"       PRG
1     ">----SOUND-----<"    SEQ
2     "BEEPER.L"            SEQ
4     "FANFARE"             PRG
10    "MUSIC/DEMO"          PRG
1     ">--DISK ACCESS-<"    SEQ
13    "AUTO'DIRECTORY"      PRG
8     "COPY&LABEL"          PRG
16    "DIR'LISTER"          PRG
29    "DIR'MANIPULATOR"     PRG
7     "DISK'GET/DEMO"       PRG
16    "DISK'PROTECTOR"      PRG
1     "FILE'TO'SCREEN"      PRG
38    "TWO'DRIVE'COPIER"    PRG
6     "TWO'DRIVE'INSTRU"    PRG
8     "UTILITIES"           PRG
14    "VIEW'DIRECTORY"      PRG
1     ">----MODEM-----<"    SEQ
7     "TERMINAL"            PRG
27    "VT-52.V4"            PRG
1     ">----OTHER-----<"    SEQ
6     "BASIC'TO'COMAL"      PRG
5     "COLOR'COMBO"         PRG
3     "DEC'TO'HEX/DEMO"     PRG
14    "DYNAM-DATA-8"        PRG
5     "FIND'STRING/FAST"    PRG
8     "FIND'STRING/FULL"    PRG
18    "FORMATTER2"          PRG
2     "HEX'TO'DEC/DEMO"     PRG
6     "LOAD'SCREEN2.L"      SEQ
20    "PIE'CHART'MAKER"     PRG
23    "PRINT'SEQ'FILES"     PRG
4     "QUICKSORT'NUMBER"    PRG
10    "QUICKSORT'STRING"    PRG
3     "REMOVE COMMENTS"     PRG
6     "SAVE'SCREEN.L"       SEQ
4     "TURTLE/DEMO"         PRG
1     ">THE FOLLOWING <"    SEQ
1     ">PROGRAM IS IN <"    SEQ
1     ">BASIC         <"    SEQ
17    "1541BACKUP(FREE)"    PRG
```

```
0 "NWUG DISK #1     " SD 2A
1     "BOOT"                PRG
4     " TITLE.SCREEN"       PRG
4     " TITLE.SCREEN.2"     PRG
9     "."                   PRG
25    "DISK CRACKER 4.0"    PRG
10    "4.0 ASM/MONITOR "    PRG
8     "BOOT MAKER"          PRG
9     "64 EYED BANDIT"      PRG
2     "ERROR LOCATION"      PRG
25    "DECIPHER"            PRG
2     "SEQ FILE EXAMPLE"    PRG
1     "C-64 WEDGE"          PRG
4     "DOS 5.1"             PRG
6     "FFORMAT"             PRG
11    "4 MIN COPY-1541"     PRG
6     "COPY DOS"            PRG
2     "DRIVE CLEAN UTIL"    PRG
27    "DISK DOCTOR PLUS"    PRG
30    "DR. INSTRUCTIONS"    PRG
13    "KOALA DUMP.64"       PRG
1     "KPD--A"              PRG
2     "KPD--B"              PRG
5     "KPD--C"              PRG
1     "KPD--D"              PRG
1     "KPD--E"              PRG
1     "HEAD CLEANER"        PRG
5     "(R)ADDRESS LABEL"    PRG
3     "VIEW DOODLE"         PRG
23    "COMPACTOR"           PRG
10    "SUPERMON 64 V2"      PRG
6     "CROSS-REF64"         PRG
97    "MONOPOLE"            PRG
30    "KALEIDOSCOPE"        PRG
25    "BAD MOVIE PLOTS"     PRG
6     "64 FUNCTION KEYS"    PRG
7     "DISK LOGGER 64"      PRG
8     "FAST CHECK DISK"     PRG
3     "FIX DISK TITLE"      PRG
4     "DISK TIMER.Z"        PRG
70    "BLACK BOX.C2"        PRG
2     "USERS GUIDE INFO"    PRG
7     "DISK ID CHANGER"     PRG
```

```
0 "WAYNE'S DOODLES " DS 2A
8     "A DOODLE LOADER"     PRG
37    "DDWAYNE'S COVER"     PRG
37    "DDTILTED PANELS"     PRG
37    "DDEARLY.FACE"        PRG
37    "DDEARL.FACE X 5"     PRG
37    "DDFACE.MORE.PIX."    PRG
37    "DDFACIAL ROTATE"     PRG
37    "DDSGT.MAJOR"         PRG
37    "DDCANDL.HALFDONE"    PRG
37    "DDPEN AND CANDLE"    PRG
37    "DDGREEN HEXAGON"     PRG
37    "DDTHREE HEXAGONS"    PRG
37    "DDEARLY.LANDSCP."    PRG
37    "DDLANDSCP.HALFDN"    PRG
37    "DDMIDDLE EARTH"      PRG
37    "DDFROM LANDSCAPE"    PRG
37    "DDTWINLANDSCAPE"     PRG
37    "DDLANDSC.SKEL.BW"    PRG
9     "PLEASE READ 1ST"     PRG
1     "----------------"    PRG
12    "AUTO.DDL.LDR.V2"     PRG
```

```
0 "CCCC MUSIC # 2 " M12 2A
9     "JUKEBOX"             PRG
29    "GLORIA30120"         PRG
26    "MAGNUM30120"         PRG
20    "RAIDER30120"         PRG
21    "MAPLE30120"          PRG
20    "BILLB30120"          PRG
26    "CARS30120"           PRG
18    "DOODLE30120"         PRG
21    "I WILL30120"         PRG
44    "STAIRWAY30120"       PRG
26    "TIMEBOTTLE30120"     PRG
22    "WHWEBELONG30120"     PRG
23    "VINCENT30120"        PRG
23    "ROCKY30120"          PRG
26    "ENDTIMECHI30120"     PRG
20    "DOWNTOWN30120"       PRG
34    "EVERGREEN30120"      PRG
18    "RAINDROPS30120"      PRG
25    "GREATLORD30120"      PRG
16    "WILDFLOWER30120"     PRG
26    "GHOSTBUST30120"      PRG
25    "PINKPANTH30120"      PRG
22    "HELLO DOLLY30120"    PRG
20    "HARDMONEY30120"      PRG
19    "ENTERTAINER30120"    PRG
39    "BEAT IT30120"        PRG
28    "FLASHDANCE30120"     PRG
5     "--- READ ME ---"     PRG
```

```
0 "LANDSCAPE.DOODLE" LD 2A
37    "DDLANDSCAPE.01"      PRG
37    "DDLANDSCAPE.04"      PRG
37    "DDLANDSC.06 COL"     PRG
37    "DDLANDSC.07 COL"     PRG
37    "DDLANDSC.08 COL"     PRG
37    "DDLANDSC.09 COL"     PRG
37    "DDLANDSC.10 COL"     PRG
37    "DDLANDSC.11 COL"     PRG
37    "DDLANDSC.12 COL"     PRG
37    "DDLANDSC.DONE"       PRG
37    "DDLANDSC.SKEL.BW"    PRG
37    "DD DN.W/O.CL B/W"    PRG
37    "DDLND.DN W/O CLO"    PRG
37    "DD4-PAN.LANDSC."     PRG
37    "DDFRM.LNDSCP.EXP"    PRG
37    "DDSKL.LNDS.TWN12"    PRG
37    "DDTWINLANDSCAPE"     PRG
12    "AUTO.DDL.LDR.V2"     PRG
9     "PLEASE READ 1ST"     PRG
```

```
DISK NAME = "COLIN UTIL VOL6 " U6

15    ">RUN ME FIRST<"      PRG
47    "FAST.EDIT"           PRG
8     "WORDMANAGER"         USR
34    "SPEEDSCRIPT"         PRG
10    "TOTL.TEXT"           SEQ
1     "CONTROL Z"           SEQ
2     "CONTROL S"           PRG
3     "EASYSCRIPT"          SEQ
2     "HES"                 SEQ
82    "WORDPRO"             SEQ
2     "test"                PRG
3     "PCLIP WORDPRO CV"    PRG
32    "EDITOR"              PRG
25    "WRITER.2"            PRG
69    "instructions"        PRG
36    "PRNT.SEQ.DOCUMNT"    PRG
10    "PAPERMATE"           SEQ
23    ">------<"            PRG
7     "WPRO-ES CONV"        PRG
6     "WPRO-PAPERMATE"      PRG
4     "writer inst"         PRG
5     "SD2 COPIER"          PRG
2     "DIEDOC"              SEQ
33    "EDITOR BU"           PRG
3     "PAPERMATE TO WPR"    PRG
2     "WRITE NOW 64"        PRG
4     "CATPRINTER"          PRG
23    "80 LABEL-IT"         PRG
4     "VICCAT"              PRG
4     "TABBY"               PRG
14    "VIC 20 LABEL-IT"     PRG
10    "LABEL-IT.BAS"        PRG
```

```
0 "RASMUSSEN ML     " U8 2A
37    "ALL INSTRUCTIONS"    PRG
2     "BCL"                 PRG
16    "FD"                  PRG
3     "LC"                  PRG
4     "LCS"                 PRG
4     "LM"                  PRG
9     "ODFC"                PRG
3     "PC"                  PRG
4     "PCS"                 PRG
5     "PM"                  PRG
3     "PSF"                 PRG
8     "TDDC"                PRG
9     "WW"                  PRG
18    "WW INSTRUCTIONS"     PRG
37    "INSTRUCTIONS"        PRG
```

```
0 "STAR MADNESS     " SM 2A
12    "ALIEN INVADERS"      PRG
10    "ALIEN WAR"           PRG
3     "MARS LANDER"         PRG
3     "UFO GUNNER"          PRG
10    "HYPERSPACE"          PRG
15    "ZODIAC"              PRG
31    "METEOR SEA"          PRG
40    "PLANET"              PRG
72    "STAR WAR"            PRG
88    "SUPERTREK.C"         PRG
87    "MOONLIGHT"           PRG
71    "CONSTELLATIONS"      PRG
67    "STARTREK"            PRG
17    "SPACE NIM"           PRG
25    "STAR TREK 3"         PRG
102   "SUPER DOG STAR"      PRG
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```
0 "TPUG SEPT 84.C " TB 2A
20    "LIST-ME (C)TB.L"     PRG
44    "AUTODIAL1650V5.C"    PRG
7     "TERM.64.2.C"         PRG
1     "BAUD RATE"           SEQ
1     "CHECKER"             USR
1     "NUMBERS"             SEQ
1     "TERM64 BOOT.C"       PRG
32    "TERM64"              PRG
126   "TERM64 DOC.D"        SEQ
3     "PARAMETERS.D"        SEQ
16    "VT52 40/80TERM.C"    PRG
40    "VT52 40/80DOC.D"     SEQ
41    "MIDWEST TERM.C"      PRG
11    "3 MIN BACKUP.C"      PRG
5     "1650 DIAL/LOAD.C"    PRG
36    "STORY WRITER.C"      PRG
30    "STORY INST.D"        SEQ
3     "REINFORCER.C"        PRG
5     "CHESS.C"             PRG
50    "CHESS-64"            PRG
1     "CHESS/CLK"           PRG
9     "CHS/CHAR"            PRG
68    "SYNTH SAMPLE.C"      PRG
10    "RELFILE COPY.C"      PRG
47    "TUNNEL MAZE.C"       PRG
33    "TUNN.D"              PRG
4     "MUSIC SYS49152.C"    PRG
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0 "TPUG SEPT 84.C " TB 2A
20    "LIST-ME (C)TB.L"     PRG
44    "AUTODIAL1650V5.C"    PRG
7     "TERM.64.2.C"         PRG
1     "BAUD RATE"           SEQ
1     "CHECKER"             USR
1     "NUMBERS"             SEQ
1     "TERM64 BOOT.C"       PRG
32    "TERM64"              PRG
126   "TERM64 DOC.D"        SEQ
3     "PARAMETERS.D"        SEQ
16    "VT52 40/80TERM.C"    PRG
40    "VT52 40/80DOC.D"     SEQ
41    "MIDWEST TERM.C"      PRG
11    "3 MIN BACKUP.C"      PRG
5     "1650 DIAL/LOAD.C"    PRG
36    "STORY WRITER.C"      PRG
30    "STORY INST.D"        SEQ
3     "REINFORCER.C"        PRG
5     "CHESS.C"             PRG
50    "CHESS-64"            PRG
1     "CHESS/CLK"           PRG
9     "CHS/CHAR"            PRG
68    "SYNTH SAMPLE.C"      PRG
10    "RELFILE COPY.C"      PRG
47    "TUNNEL MAZE.C"       PRG
33    "TUNN.D"              PRG
4     "MUSIC SYS49152.C"    PRG
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0 "SLIDE SHOW #2    " MK 2A
36    "SLIDE SHOW"          PRG
1     " DIRECTORY"          SEQ
32    "SPIRAL.1.HRG"        PRG
32    "SUE.HRG"             PRG
32    "SESAME.ST.HRG"       PRG
32    "SNOOPY.HRG"          PRG
32    "ALBERT.HRG"          PRG
32    "DOLLAR.HRG"          PRG
32    "DIP.HRG"             PRG
32    "DONALD.DUCK.HRG"     PRG
32    "DES.1.HRG"           PRG
32    "7-3HILL.HRG"         PRG
32    "MUSIC.HRG"           PRG
32    "MAP.HRG"             PRG
32    "DIANE.HRG"           PRG
32    "WILLY.HRG"           PRG
32    "SINCOS1.HRG"         PRG
32    "WATCH.HRG"           PRG
32    "WINSTON.HRG"         PRG
32    "MICROMETER.HRG"      PRG
32    "RACCOON.HRG"         PRG
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0 "PICTURE DISK #1 " P1 2A
36    "SLIDE SHOW"          PRG
1     " DIRECTORY"          SEQ
32    "MOIRE1.HRG"          PRG
32    "MOIRE2.HRG"          PRG
32    "PATTERN2.HRG"        PRG
32    "NUDE1.HRG"           PRG
32    "GIRL.HRG"            PRG
32    "NUDE2.HRG"           PRG
32    "SPACECRAFT.HRG"      PRG
32    "EARRING.HRG"         PRG
32    "PATTERN1.HRG"        PRG
32    "LINEFIG1.HRG"        PRG
32    "CAVEMAN.HRG"         PRG
32    "MAN.HRG"             PRG
32    "TETRAD.HRG"          PRG
32    "SNAIL.HRG"           PRG
32    "PATTERN3.HRG"        PRG
32    "PETROOM.HRG"         PRG
32    "LINEFIG2.HRG"        PRG
32    "LINEFIG4.HRG"        PRG
32    "LINEFIG3.HRG"        PRG
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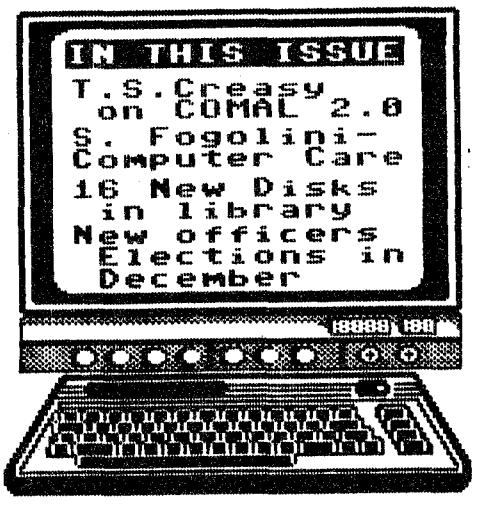
ATTENTION!
Now is the time to for all good men to come to the aid of their country. Or for club members to renew their dues. Dues for 1985 are $20.00. To continue your membership without interruption, send the enclosed form to Bruce Nelson, c/o MCCC, P. O. Box 1578, Bedford, Texas 76021



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The MID-CITIES COMMODORE CLUB is a non-profit organization devoted to the collection and dissemination of computer knowledge, to the encouragement of computer education and to the use of Commodore computers in the home, at school and in business. Appropriate and legal use of all types of software shall be encouraged by this club.

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Our meetings are open to all. Yearly membership dues are $20.00 and entitle the member to a monthly mailed copy of MCCC NEWS, the club newsletter, and library copying privileges. Dues are paid on a calendar year basis and new members who join after March 31st of each year pay prorated dues for the months remaining in the year.

Dues may be paid at any chapter or club meeting or by sending them to Bruce Nelson, Treasurer, P.O. Box 1578, Bedford, TX 76021.

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